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09/263,114	03/05/1999	GERARD K. YEH	21333/0209039-US0	1407
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Zoran Corporation c/o DARBY & DARBY PC P.O. Box 770 Church Street Station New York, NY 10008-0770			EXAMINER HARRISON, CHANTE E	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/263,114

**Applicant(s)**

YEH ET AL.

**Examiner**

CHANTE HARRISON

**Art Unit**

2628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-132 is/are pending in the application.

4a) Of the above claim(s) 1-7, 23, 24, 26, 28-36, 38, 50-96, 98-100, 106, 107, 128-132 is/are withdrawn from consideration.

- 5) ☒ Claim(s) 8-18, 37, 39-49, 97, 101, 105, 108-116, 121, 122, 124, 126, 127 is/are allowed.

- 6) ☒ Claim(s) 19, 21, 22, 25, 27, 117, 119, 120, 123 and 125 is/are rejected.

- 7) ☒ Claim(s) 20 and 118 is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.

- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)

- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)

- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date \_\_\_\_\_

- 5) ☐ Notice of Informal Patent Application

- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed on 12/21/07.

This action is made FINAL.

2. Claims 8-18, 19-22, 25, 27, 37, 39-49, 97, 101-105, 108-127 are pending in the case. Claims 8, 19, 22, 25, 27, 37, 97, 117, 120, 123 and 125 are independent claims. Claims 8, 10-17, 19, 22, 25, 27, 37, 42, 44, 46, 47, 97, 102-105, 108-15, 117, 120, 123 and 125 have been amended. Claims 1-7, 23-24, 26, 28-36, 38, 50-96, 98-100, 106, 107 and 128-132 have been canceled.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 19, 21, 22, 25, 117, 119, 120 and 123 are rejected under 35

U.S.C. 102(e) as being anticipated by Alexander MacInnis et al., US 2007/0103489, 5/2007.

As per independent claim 19, MacInnis discloses determining whether a first display position on a display panel at which a first pixel of the output image is to be displayed is within an active display region of the display panel (i.e. window descriptors identify the location on the screen and are used to identify the current active window) (Para 52, 160);

performing active display processing to generate the output image if the first display position is within the active display region of the display panel (Para 159, 321); and

performing blanking processing to generate the output image if the first display position is not within the active display region of the display panel (i.e. updating the CLUT data during horizontal blanking) (Para 64);

Art Unit: 2628

wherein the first image and the second image are selected from the group consisting of a digital video image (i.e. video data), an analog video image (i.e. passthrough video), a graphics image, and a background color (Para 55).

As per dependent claims 21 and 119, MacInnis discloses wherein the graphics image comprises a cursor image (Para 51).

As per independent claim 22, MacInnis discloses determining whether a first display position on a display panel at which a first pixel of the output image is to be displayed is within an active display region of the display panel (i.e. window descriptors identify the location on the screen and are used to identify the current active window) (Para 52, 160);

performing active display processing to generate the output image if the first display position is within the active display region of the display panel (Para 159, 321); and performing blanking processing to generate the output image if the first display position is not within the active display region of the display panel (i.e. updating the CLUT data during horizontal blanking) (Para 64);

wherein the output image is displayed on the display panel in an interlaced display mode (Para 60).

As per independent claim 25, MacInnis discloses determining whether a first display position on a display panel at which a first pixel of the output image is to be displayed is within an active display region of the display panel (i.e. window descriptors identify the location on the screen and are used to identify the current active window for processing image data) (Para 52, 160);

performing active display processing to generate the output image if the first display position is within the active display region of the display panel (Para 159, 321); and performing blanking processing to generate the output image if the first display position is not within the active display region of the display panel (i.e. updating the CLUT data during horizontal blanking) (Para 64);

wherein determining whether the first display position is within the active display region comprises determining whether the display panel is in a blanking state, the first display position is within the active display region if the display panel is not in the blanking state (i.e. using the blank start address and its offset parameter value to determine the start position of the blanking interval and where the active window begins) (Para 110, 199, 201);

wherein the display panel is in the blanking state if the display panel is in a horizontal blanking period (Para 64).

As per independent claim 117, MacInnis discloses receiving at a display processing system, the plurality of images in a plurality of formats and from a plurality of sources,

Art Unit: 2628

wherein the plurality of sources includes a video data source and a graphics data source (abstract). The rationale as applied in the rejection of claim 19 applies herein.

As per independent claim 120, MacInnis discloses receiving at a display processing system, the plurality of images in a plurality of formats and from a plurality of sources, wherein the plurality of sources includes a video data source and a graphics data source (abstract). The rationale as applied in the rejection of claim 22 applies herein.

As per independent claim 123, MacInnis discloses receiving at a display processing system, the plurality of images in a plurality of formats and from a plurality of sources, wherein the plurality of sources includes a video data source and a graphics data source (abstract). The rationale as applied in the rejection of claim 25 applies herein.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 27 and 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert Cherry et al., US 5, 629,720, 5/1997.

As per dependent claim 27, Cherry discloses determining whether a first display position on a display panel at which a first pixel of the output image is to be displayed is within an active display region of the display panel (i.e. window index and frame buffer data are relative to addresses for display col. 6, ll. 8-20, where a pixel may be mapped to an address corresponding to the color look up tables col. 4, ll. 4-9; col. 3, ll. 10-15; and determining whether plane enable data col. 10, 8-12, 50-55 and index data col. 10, ll. 20-27, 55-60 indicate an active status for a window to be displayed)

performing active display processing (i.e. resolving dominance of priority of display) (col. 11, ll. 9-21) if the first display position (col. 6, ll. 8-20) is within the active display region of the display panel (col. 11, ll. 9-21); and updating the color data during blanking intervals (col. 4, ll. 21-25), wherein blanking processing comprises generating, based upon a blanking control input (i.e. the write of a command, e.g. (1)<sub>2</sub>) (col. 13, ll. 26-27), either a blank signal, an end of active video (EAV) signal (i.e. a stop signal) (col. 13, ll. 20-26), a start of active video (SAV) signal (i.e. a start signal) (col. 13, ll. 20-26), a



constant value, a previous output pixel, or a pixel of ancillary data wherein the ancillary data is a text data, a video data, or a graphics data.

Cherry fails to specifically disclose performing blanking processing if the first display position is not within the active display region of the display panel.

It would have been obvious to one of ordinary skill in the art to include performing blanking processing if the first display position is not within the active display region of the display panel with the method of Cherry because Cherry teaches refreshing during blanking interval (col. 13, ll. 20-37), which indicates that the data is input into the color maps prior to the data being used to determine active status.

One of skill in the art would have been motivated to include performing blanking processing if the first display position is not within the active display region of the display panel with the method of Cherry for the advantage of updating color data when the window data is not active.

As per independent claim 125, Cherry discloses receiving at a display processing system, the plurality of images in a plurality of formats and from a plurality of sources, wherein the plurality of sources includes a video data source and a graphics data source (i.e. image data and overlay data) (Fig. 2 "202", "208"). The rationale as applied in the rejection of claim 27 applies herein.

***Allowable Subject Matter***

3. Claims 8-18, 37, 39-49, 97, 101-105, 108-116, 121,122, 124, 126, 127 are allowed.
4. Claims 20 and 118 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments filed 12/21/07 have been fully considered but they are not persuasive.

Applicant argues MacInnis' provisional application 60/10,875 lacks disclosure of one or more features in the MacInnis reference relied upon in the rejection.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Applicant argues MacInnis fails to teach performing blanking processing to generate the output pixel.

In response, MacInnis teaches blanking processing as he teaches not rewriting the CLUT during the time period between successive lines of the display, such that during that time period, which is the horizontal blanking interval, the output pixel data is not processed. Blanking processing is defined as the period of time between successive display frames or display lines when video/image data is not displayed in order to switch pointers to a buffer and/or transmit additional data (Wikipedia, The Free Encyclopedia, [www.en.wikipedia.org](http://www.en.wikipedia.org)). Thus, MacInnis teaches performing blanking

processing to generate the output pixel as he teaches not updating the CLUT data needed to display image data during a blanking interval, which suggests that blanking processing directs the generation of the output pixel at the beginning of the next frame to the CLUT previously written.

Applicant argues Cherry fails to teach performing blanking processing to generate the output pixel.

In response, Cherry teaches performing blanking processing as he teaches updating the CLUT values during blanking, where the CLUT values control the color of the pixels output to display. Thus, Cherry's teaches the transmission of additional data during blanking intervals, such that the transmitted data is used in generating the output pixel to display (the above rationale applies herein). Therefore, Cherry teaches performing blanking processing to generate the output pixel.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ch  
March 11, 2008  
/Chante Harrison/  
Primary Examiner, Art Unit 2628